Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-20 (canceled).

Claim 21 (currently amended): A vacuum plasma chamber for processing a workpiece, the chamber including: a first electrode for electrical coupling with gas in the chamber and for connection to a first relatively high frequency RF source, a second electrode for carrying the workpiece and electrical coupling with gas in the chamber and for connection to a second relatively low frequency RF source, an exterior wall at a reference potential, and a plasma excitation region for confining the plasma, the region being spaced from the exterior wall, wherein

the plasma excitation region including (a) louvers ~~connected~~ spaced from the wall, the plasma excitation region being arranged so that the gas flows into the plasma excitation region through the first electrode and out of the plasma excitation region between the louvers, and (b) first and second surfaces at the reference potential, the first surface being located between the louvers and the electrode for carrying the workpiece, the second surface being located between the louvers and the first electrode.

Claim 22 (canceled).

Claim 23 (previously presented): The chamber of claim 21 wherein the plasma excitation region is bounded by said electrodes and louvers.

Claim 24 (previously presented): The chamber of claim 21 wherein the plasma excitation region is symmetrical with respect to the chamber exterior wall and a center point on the electrode for carrying the workpiece.

Claim 25 (currently amended): The chamber of claim 24 wherein the plasma excitation region is arranged so that the spacing between said ~~electrodes~~ louvers can be changed at will.

Claim 26 (canceled).

Claim 27 (previously presented): The chamber of claim 21 wherein the excitation region has a geometry such that different sheaths are developed between the plasma in the excitation region and between each of (a) the electrode for carrying the workpiece, (b) the first electrode and (c) the first and second surfaces at the reference potential.

Claim 28 (previously presented): The chamber of claim 27 wherein the excitation region geometry is such that current at the low frequency has a tendency to flow to a greater extent between the electrode for carrying the workpiece and the first electrode than from the electrode for carrying the workpiece to the surfaces of the excitation region at the reference potential.

Claim 29 (previously presented): The chamber of claim 28 wherein the excitation region geometry is such that current at the high frequency has a tendency to flow to a greater extent between the first electrode to the surfaces of the excitation region at the reference potential than from the first electrode to the electrode for carrying the workpiece.

Claim 30 (previously presented): The chamber of claim 27 wherein the excitation region geometry is such that current at the high frequency has a tendency to flow to a greater extent between the first electrode to the surfaces of the excitation region at the reference potential than from the first electrode to the electrode for carrying the workpiece.

Claim 31 (original): The chamber of claim 21 in combination with a processor including the first and second RF sources, the first RF source being connected to the first electrode, the second RF source being connected to the second electrode.

Claim 32 (original): The combination of claim 31 further including a filter arrangement connected to the first and second RF sources and the first and second electrodes for: (1) enabling current from the first RF source to flow to the first electrode, (2) preventing the substantial flow of current from the first RF source to the second electrode and the second RF source, (3) enabling current from the second RF source to flow to the first and second electrodes, and (4) preventing the substantial flow of current from the second RF source to the first RF source.

Claim 33 (previously presented): A vacuum plasma chamber for processing a workpiece, the chamber including: a first electrode for electrical coupling with gas in the

chamber and for connection to a first relatively high frequency RF source, a second electrode for carrying the workpiece and electrical coupling with gas in the chamber and for connection to a second relatively low frequency RF source, an exterior wall at a reference potential, and a plasma excitation region for confining the plasma, the plasma excitation region including louvers at the reference potential and the first and second electrodes, the louvers being spaced from the exterior wall, the plasma excitation region being arranged for enabling gas to be excited to the plasma to flow into the plasma confinement region and out of the confinement region between the louvers, the plasma excitation region including first and second surfaces at the reference potential, the first surface being located between the louvers, and the electrode for carrying the workpiece, the second surface being located between the louvers and the first electrode.

Claim 34 (original): The chamber of claim 33 wherein the plasma excitation region is bounded by said electrodes and louvers.

Claim 35 (original): The chamber of claim 33 wherein the plasma excitation region is symmetrical with respect to the chamber exterior wall and a center point on the electrode for carrying the workpiece.

Claim 36 (currently amended): The chamber of claim 35 wherein the plasma excitation region is arranged so that the spacing between said ~~electrodes~~ louvers can be changed at will.

Claim 37 (canceled).

Claim 38 (previously presented): The chamber of claim 33 wherein the excitation region has a geometry such that different sheaths are developed between the plasma in the excitation region and between each of (a) the electrode for carrying the workpiece, (b) the first electrode and (c) the first and second surfaces at the reference potential.

Claim 39 (previously presented): The chamber of claim 38 wherein the excitation region geometry is such that current at the low frequency has a tendency to flow to a greater extent between the electrode for carrying the workpiece and the first electrode than from the electrode for carrying the workpiece to the surfaces of the excitation region at the reference potential.

Claim 40 (previously presented): The chamber of claim 39 wherein the excitation region geometry is such that current at the high frequency has a tendency to flow to a greater extent between the first electrode to the surfaces of the excitation region at the reference potential than from the first electrode to the electrode for carrying the workpiece.

Claim 41 (previously presented): The chamber of claim 38 wherein the excitation region geometry is such that current at the high frequency has a tendency to flow to a greater extent between the first electrode to the surfaces of the excitation region at the reference potential than from the first electrode to the electrode for carrying the workpiece.

Claim 42 (original): The chamber of claim 33 in combination with a processor including the first and second RF sources, the first RF source being connected to the first electrode, the second RF source being connected to the second electrode.

Claim 43 (original): The combination of claim 42 further including a filter arrangement connected to the first and second RF sources and the first and second electrodes for: (1) enabling current from the first RF source to flow to the first electrode, (2) preventing the substantial flow of current from the first RF source to the second electrode and the second RF source, (3) enabling current from the second RF source to flow to the first and second electrodes, and (4) preventing the substantial flow of current from the second RF source to the first RF source.

Claim 44 (previously presented): A vacuum plasma chamber for processing a workpiece, the chamber including: (i) a confined plasma excitation region arranged for enabling (a) gas to flow into the region, (b) gas to be excited to a plasma in the region, (c) enabling unionized gas to flow out of the region and (d) preventing the substantial flow of plasma and ionized gas from the region, and (ii) an outlet downstream of the region for the gas flowing out of the region; the region including (a) a first electrode for electrical coupling with gas in the region and for connection to a first relatively high frequency RF source, (b) a second electrode for carrying the workpiece and electrical coupling with gas in the chamber and for connection to a second relatively low frequency RF source, and a third electrode entirely in the region and connected to a reference potential.

Claim 45 (previously presented): The chamber of claim 44 wherein the excitation region and a chamber wall are substantially isolated from each other by a structure of the confined plasma excitation region.

Claim 46 (previously presented): The chamber of claim 45 wherein the confinement arrangement includes an arrangement for affecting the gas pressure in the region.

Claim 47 (previously presented): The chamber of claim 45 wherein the structure includes a louver arrangement for substantially confining the plasma to the region.

Claim 48 (original): The chamber of claim 47 wherein louvers of the louver arrangement have high electrical conductivity and are at the reference potential.

Claim 49 (original): The chamber of claim 47 wherein louvers of the louver arrangement have low electrical conductivity and float electrically and are arranged to mechanically confine the plasma.

Claim 50 (original): The chamber of claim 49 wherein the spacing between adjacent pairs of the louvers is such as to provide the mechanical confinement.

Claim 51 (original): The chamber of claim 50 wherein the spacing is adjustable.

Claims 52-65 (canceled).

Claim 66 (currently amendcd): The chamber of claim 21 wherein thc louvers have high electrical conductivity and are at the refcrence potential.

Claim 67 (previously presented): The chamber of claim 21 wherein the louvers have low electrical conductivity and float electrically and are arranged to mechanically confine the plasma.

Claim 68 (previously presented): The chamber of claim 67 wherein thc spacing between adjacent pairs of the louvers is such as to provide the mechanical confinement.

Claim 69 (previously presented): Thc chamber of claim 68 wherein thc spacing is adjustable.

Claim 70 (currently amended): The chamber of claim 33 wherein the louvers have high electrical conductivity and are at the reference potential.

Claim 71 (previously presented): The chamber of claim 33 wherein the louvers have low electrical conductivity and float electrically and are arranged to mechanically confine the plasma.

Claim 72 (previously presented): The chamber of claim 71 wherein the spacing between adjacent pairs of the louvers is such as to provide the mechanical confinement.

Claim 73 (previously presented): The chamber of claim 72 wherein the spacing is adjustable.

Claim 74 (previously presented): The chamber of claim 21 wherein the sum of the areas of the first and second surfaces is about two times the sum of the areas of the first and second electrodes.

Claim 75 (previously presented): The chamber of claim 33 wherein the sum of the areas of the first and second surfaces is about two times the sum of the areas of the first and second electrodes.